## WHAT IS CLAIMED IS:

1. An optical connector, comprising:

a bundle of a plurality of optical fibers surrounded by an insulating medium which, in turn, is surrounded by a cylindrical conductor with the bundle of optical fibers having one end portion exposed from both the insulating medium and the conductor:

two ferrules each including a hollow cylindrical member and a hollow cylinder coupled to the cylindrical member and aligned therewith in an axial direction so that the bundle of optical fibers is adapted to pass both the cylinder and the cylindrical member of one ferrule through that of the other ferrule in a straight line;

a sleeve put on a coupling of the ferrules; and

an alignment mechanism formed on the cylindrical member of either ferrule so as to fasten the aligned ferrules.

- 15 2. The optical connector of claim 1, wherein the sleeve comprises a lengthwise slit so as to have a predetermined degree of flexibility.
  - 3. The optical connector of claim 1, wherein the alignment mechanism comprises two keyways each formed on an outer surface of the cylindrical member of either ferrule, and a key put into the keyways.

20

5

10